



powerMELA duo280

Drives and Generators

KEY FEATURES

- electric retrofit of existing machines
- SAE 1 flange for easy integration
- Drive controller with J1939 protocol
- oil cooling for compact design

TECHNICAL DATA

- Maximum torque 3770Nm
- Maximum power 301kW
- Maximum speed 1935rpm
- ready for 400V and 800V Systems
- IP6k9k / -40 ... +85°C / -40 ... +185°F / ruggedized

ACCESSORIES

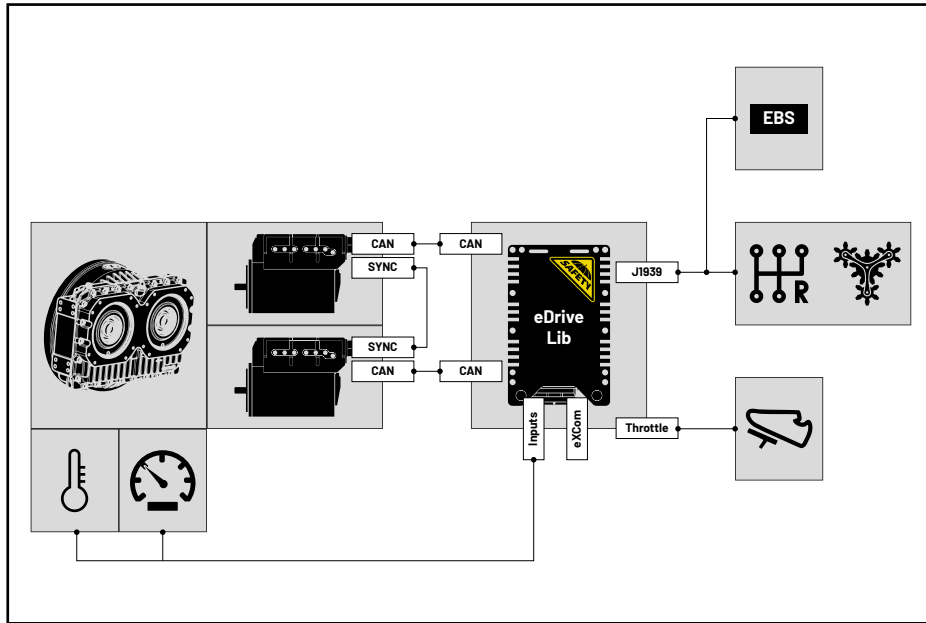
- Powermanagement
- Ancillarymanagement
- Thermomanagement
- Brake Chopper
- PDU
- 12/24 V DC/DC converter

Sensor-Technik Wiedemann GmbH

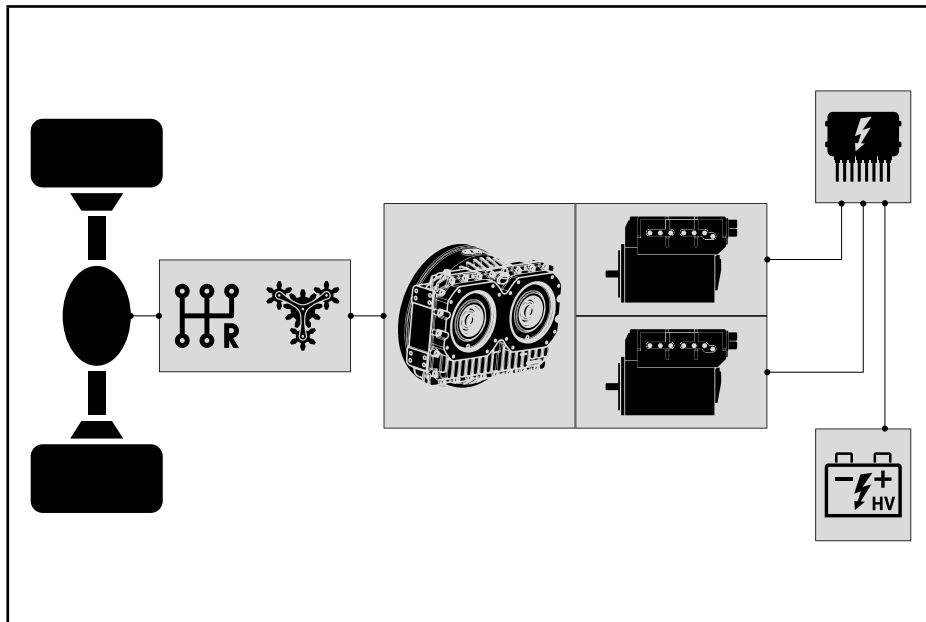
Am Bärenwald 6
87600 Kaufbeuren

+49 8341 9505-0
info@sensor-technik.de
www.stw-mm.com

SYSTEM ARCHITECTURE



SYSTEM OVERVIEW



TECHNICAL DATA

Basic data

Gear ratio	3,1
Weight	470 kg (All components)

Input data

Nominal input speed	2900 rpm
Maximum input speed	6000 rpm
Nominal input torque	900 Nm (2 x 450 Nm)
Maximum input torque	1218 Nm (2 x 608 Nm)

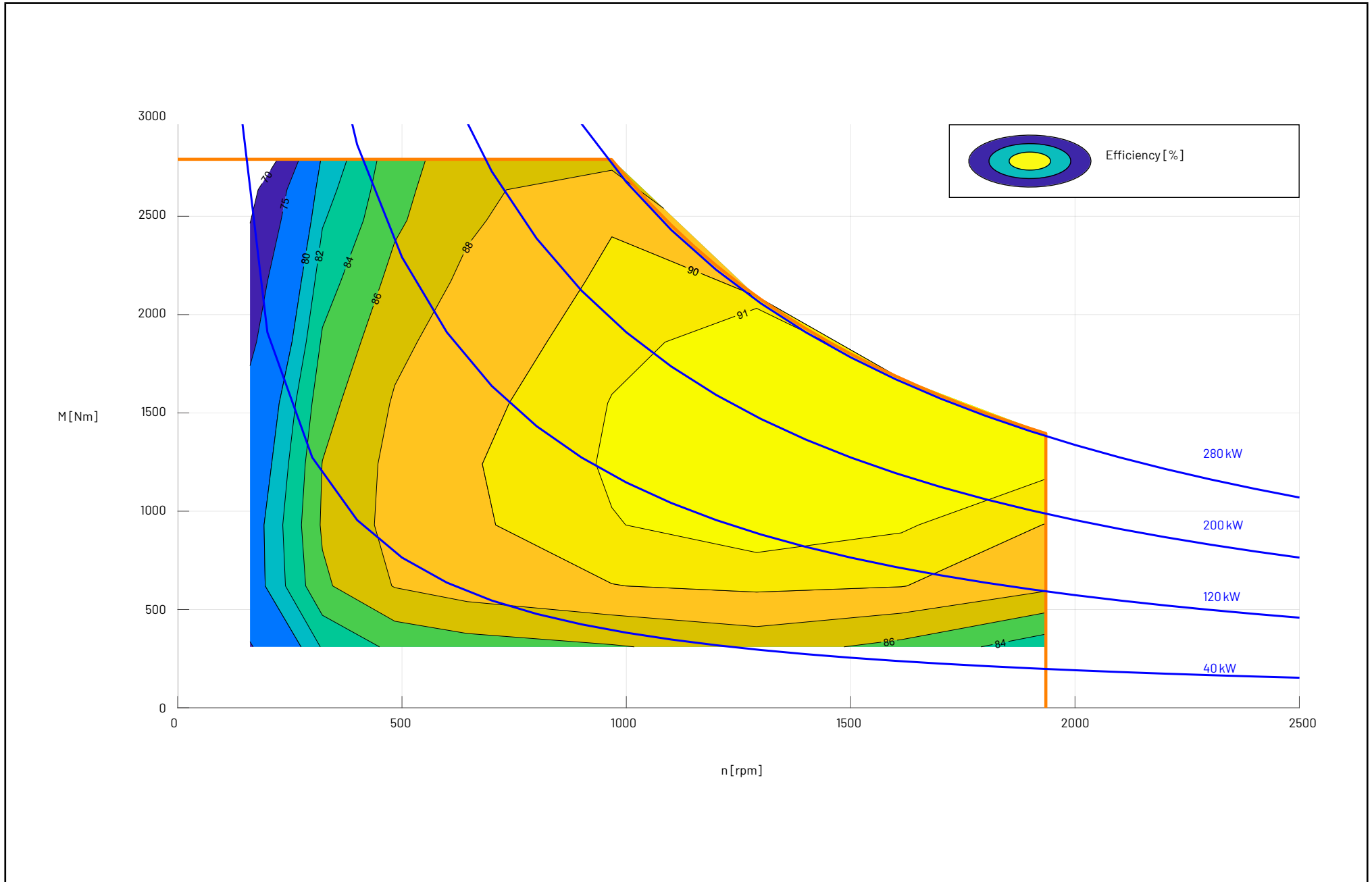
Output data

Nominal output speed	936 rpm
Maximum output speed	1935 rpm
Nominal output torque	2800 Nm
Maximum output torque	3770 Nm
Efficiency of gearbox	0,98
Nominal output power	274 kW
Maximum output power	301 kW

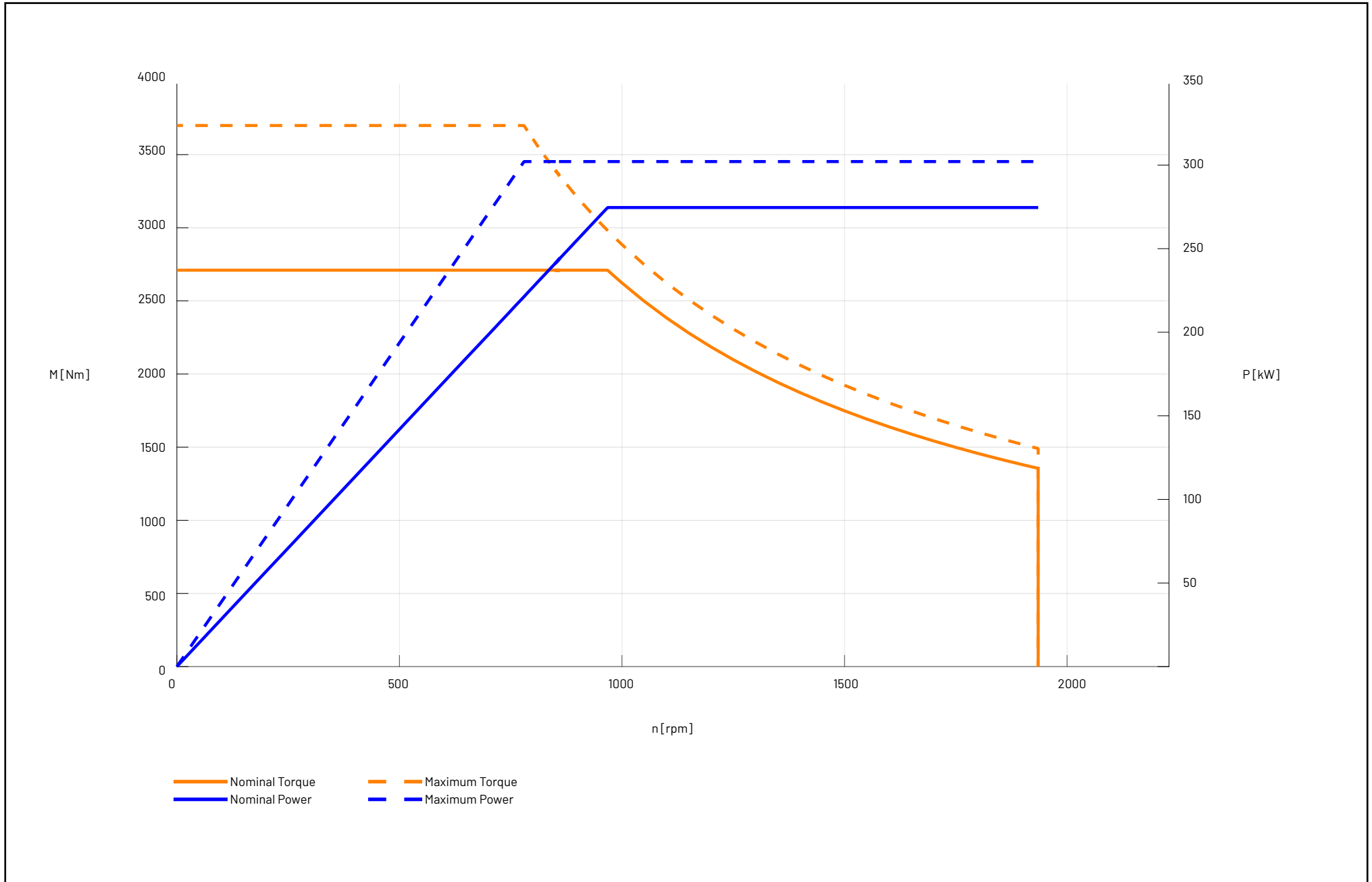
Features

- Usable with 2 powerMELA C80 or C140 motors
- Drive controller with J1939 protocol
- SAE 1 flange allows combination with automatic transmission systems
- Includes sensors for speed and temperature
- Integration in the STW Standard Electrification System (Power-, Ancillary- and Thermo-management)
- Designed for HighVoltage Systems up to 800 V
- Synchronized operation for low wear and high efficiency
- Energy recuperation mode

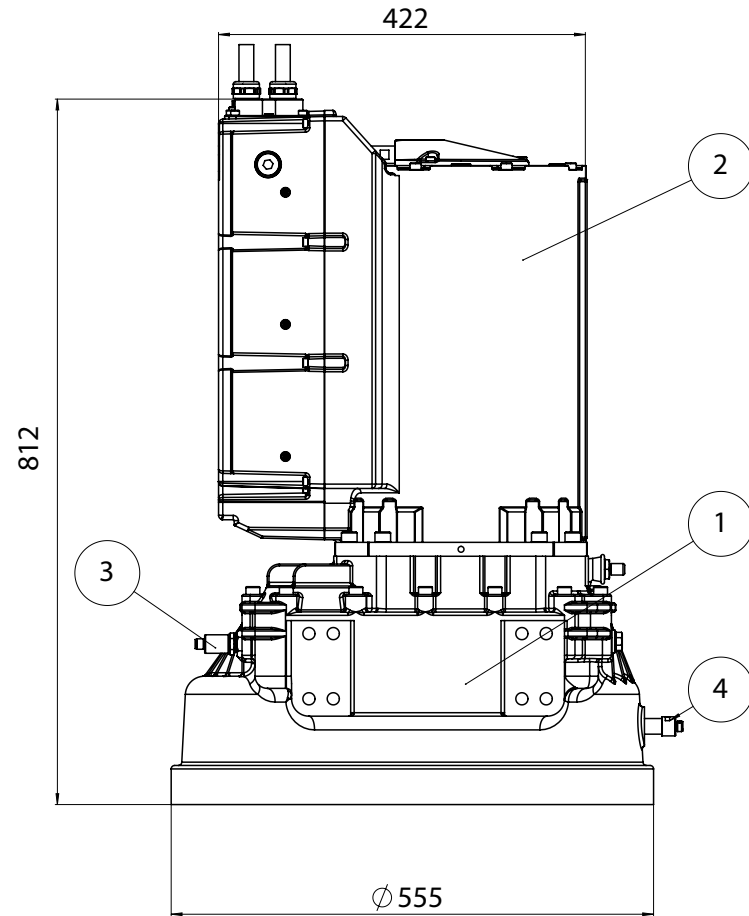
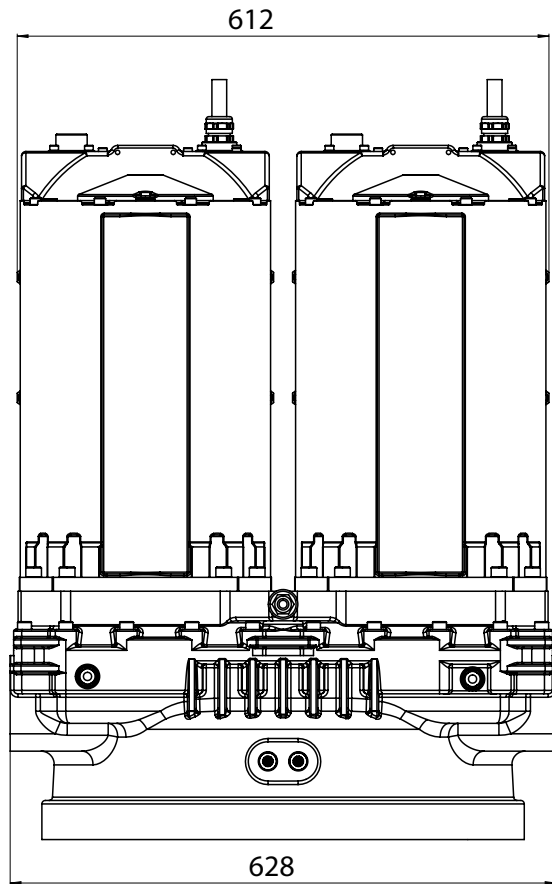
EFFICIENCY MAP



TORQUE SPEED DIAGRAM



TECHNICAL DRAWING



Pos. Denotation	Description	Quantity
1 Summary gear	i=3,1; 2800 Nm; 1935 rpm	1
2 powerMELA C140	450 Nm; 6000 rpm; 140 kW	2
3 Temperature sensor T01 CAN	J1939; -40 ... + 150 °C / -40 ... + 302 °F	1
4 Speed / Direction sensor	PNP; 0,1 ... 20 kHz	2